

**REPORT TO THE
TWENTY-FIFTH LEGISLATURE
STATE OF HAWAII
2009**

Sanitation Branch Annual Audit

**Pursuant to Chapter 321-27.5, Hawaii Revised Statutes,
Requesting the Department of Health to Submit an Annual
Audit Report of the Sanitation Branch**

**PREPARED BY:
DEPARTMENT OF HEALTH
STATE OF HAWAII**

November 24, 2008

SANITATION BRANCH ACTIVITIES AND FINANCES DURING FY 2008

The Sanitation Branch is one of the core programs of public health that affects the broadest range of health-related activities. Its programs are established by statutes and administrative rules as statewide programs. This report provides a broad overview of the functional role and activities of the Sanitation Branch, as required under Section 321-27.5, Hawaii Revised Statutes, that states, "The Department shall perform annual audits of the sanitation branch to be completed by November 30 of each year, and shall include an audit of:

- 1) Fees collected;
- 2) The number and results of sanitation inspections;
- 3) The number of training seminars held; and
- 4) The cost of training personnel in the sanitation branch."

This report covers more than these items to look at some major sanitation issues in Hawaii.

The function of the Sanitation Branch is to promote and maintain a sanitary and healthful environment for the people and visitors of Hawaii by implementing legally required programs for:

- 1) Food protection;
- 2) Assessing and assuring that hospitals and medical facilities meet sanitation requirements;
- 3) Inspection of tenement houses, lodging houses, boarding houses, and hotels;
- 4) Licensing of tattoo artists and embalmers; and
- 5) Regulating barber shops, beauty parlors, massage parlors, tattoo shops, mortuaries, public swimming pools, and public laundries.

The Sanitation Branch focuses on its food protection program which has evolved into a complex program focusing on public health practices through education, partnerships, prevention, assessment and compliance.

Food is a significant element of Hawaii's multi-ethnic culture and is a principal attraction for visitors to Hawaii. Food contamination presents the greatest risk to public health. The Sanitation Branch protects residents and visitors from exposure to food borne illnesses by conducting inspections and assessments of food service establishments to ensure that the food they serve is safe to eat. Inspections are discussed later in this report. The branch also issues permits to restaurants and other food establishments, which total about 9,000 state-wide.

In addition, the branch promotes food protection through education. The Food Safety Consultation and Education Program plays a vital role in preventing food borne illnesses by developing and implementing food safety surveillance and control plans, and conducting educational activities to assist the food service industry and food handlers.

The branch faces a major challenge in adequately handling food protection. The branch ratio of food establishments to inspectors (Oahu, Maui, Kauai and Hawaii) far exceeds the Food and Drug Administration's (FDA's) recommendations of 150 food establishments per inspector. Oahu and Maui's average ratio is 490 food establishments per sanitarian. This means that the branch can only inspect a food establishment about once every 18-24 months. The Nation's best food protection programs average 3-4 inspections annually for their high risk establishments, two inspections annually for the medium risk establishments, and annual inspections for establishments with the least risk. In order to reach this optimum inspection frequency, the Sanitation program would need at least 14 additional inspectors on Oahu and three on Maui. In 1988, the Oahu sanitation program had 23 field inspectors. That number has dwindled to 12 for the island of Oahu.

Staff training also is a significant element for maximizing efficiency and effectiveness of staff in order to satisfy program performance objectives. Mechanisms to provide on-going education continue as the branch updates and cross trains staff in order to keep up with technological and organizational changes.

FEES COLLECTED

Under Section 321-11.5, HRS, the Department collects fees for permits, licenses, inspections, various certificates, variances and investigations and reviews. These fees are deposited into the Environmental Health Education Fund under Section 321-27(a), HRS that supports training for the Environmental Health Services Division staff and food establishment personnel; as well as provides educational outreach to the general public regarding food safety. Revenues from fees collected for fiscal year 2008 and deposited into the fund totaled \$732,883.51. HRS 321-27(c) specifies that any amount in the excess of \$300,000 on June 30 of each year shall be deposited into the general fund. The Department reports separately on HRS 321-27.

NUMBER AND RESULTS OF SANITATION FOOD INSPECTIONS

The Statewide Sanitation Branch conducted 9,395 food inspections during fiscal year 2008 and identified 14,590 violations. Oahu sanitation conducted 5,676 of these inspections. Of these, 2,691 were routine inspections (about 47% of the approx. 5,700 Food Establishments on Oahu. This equates to an inspection frequency of less than one inspection in 24 months), with 1,901 follow-up inspections. The follow up inspections on Oahu were a result of 2,467 major violations, which are considered to be food borne illness risk factors as they are identified by the Centers for Disease Control (CDC) and the FDA as major causes of food borne illness incidents.

TABLE 1

FOOD ESTABLISHMENT
INSPECTION COVERAGE & MAJOR VIOLATIONS

Island/County (population?)	Food Estab. # w/ permits	% FEs inspected	# FE/ inspector
Hawaii (#) 158,423	1399	1286/1399=92%	200
Kauai (#) 58,303	543	313/543=58%	181
Maui, Molokai, Lanai (#) 128,200	1122	1031/1122=92%	374
Oahu (#) 900,000	5,700	2691//5796=46%	482
State total (#) 1,244,926	9,395	5321/8860=60%	354

TABLE 2

FOOD ESTABLISHMENT INSPECTION DETAILS

Island/ County	Inspections					Violations		
# FE inspected	Total	Routine	Follow- up to routine	Complaint (illness claim subset)	Follow-up to complaint	Total	Major	Minor/ Esthetic
Hawaii	1904	1286	427	*172	19	1240	445	795
Kauai	689	313	287	*81	8	1744	472	1272
Maui	1528	1031	204	*126	108	2532	978	1554
Oahu	5676	2691	1901	801	283	5269	2467	2808
State	9797	5321	2819	801 (304)	418	10,791	4362	6429

*Outer isles do not differentiate between general food complaint and illness complaint. Outer isles also do not report # of violations found or corrected.

Major violations include improper employee hygiene, temperatures, storage, and handling. For examples, there are violations for employees not washing hands after using the restroom, or having open cuts and sores on their hands. They also include temperature violations such as warm refrigerators, cold hot holding units, chicken and pork being served bloody and

undercooked. Contaminated, rotten, or spoiled foods on premises, ready to eat foods stored below raw foods dripping with raw blood and juices, cutting boards used for raw and cooked foods, fruits and salads prepared with unclean cutting boards, knives, or cooks hands are also major violations. Oahu sanitation also identified 2,808 minor or esthetic violations during the same 2,691 routine inspections. There were also 801 complaint inspections that require 283 follow-up inspections. $(2,691 + 1,901 + 801 + 283 = 5,676)$

Of the 8,021 food establishments inspected state-wide, 1,249 inspections pertained to complaints, of which 304 directly alleged a food borne illness. Alleged food borne illness complaints increased 139 percent from FY 2007 when there were 127 reported food borne illness complaints, but FY 2007 was unusually low compared to 271 complaints in FY 2006, and 267 complaints in FY 2005, based on data collected by the department's Disease Investigation Branch. While prevention of illness remains the branch's ultimate goal, and food borne illness complaints are of interest, those complaints do not adequately measure program effectiveness. Current scientific literature (FDA, Journal of Public Health, Journal of Environmental Health et. al.) states that the reporting rates of food borne illnesses are extremely low, it is typically difficult to confirm the cause of illnesses, and extremely large outbreaks may result from human error which no inspection program could prevent. In these latter cases the Sanitation Branch is charged with finding the source or circumstance that lead to the outbreak and to prevent any reoccurrence of illness.

The current best measure of the effectiveness of a food regulatory program is the occurrence of major violations that are recognized as the major causes of food borne illnesses by the Center for Disease Control and the U.S. Food and Drug Administration. FDA has incorporated this scientific approach in their publication of their voluntary Model Food Code.

CHALLENGES AND STRATEGIES FOR FOOD SAFETY

The branch conducts extensive informal food safety education in addition to inspections. Food safety education is not required to operate a food establishment in the State of Hawaii, therefore restaurant operators rely very heavily on the education provided by the direct contact with our field inspectors. The Sanitation Branch relies heavily on the initial inspection of a new food establishment to educate the owners and managers on the importance of complying with our administrative rules to eliminate all major violations that are food-borne illness risk factors and keep the people of Hawaii healthy. After that initial inspection and a follow up inspection when the establishment is fully operational, most food establishments will not see the sanitarian for another two years.

Maintaining food establishment staff educated in food safety is a huge challenge. The food industry in Hawaii has one of the highest turnovers of employees in the state when compared with other industries. Additionally, most positions in the food establishment from owner to general manager to chef to food prep workers to dishwashers averages changes every two years or so, thus negating any food safety knowledge or reinforcement of the rules during that period by the Department of Health.

The Statewide Sanitation program has sought and achieved tremendous internal improvements in the past five years from having no standards of inspection and program quality or consistency for inspections, enforcement and education, to having a fully standardized staff, explicit, consistent and documented, protocol in all areas, a uniform statewide food safety education program, and a voluntary FDA pilot project on the Big Island to obtain listing as a successful participant in the voluntary Food Standards program.

The program has also increased the use of language neutral handouts on hand washing and temperature controls during food inspections (both are major contributors to food borne illnesses), and have even handed out thermometers to new and existing food establishments as part of our routine inspections along with demonstrating how to properly calibrate the thermometer before use.

The branch is focusing on reducing major violations at food establishments. This follows the best practices used in numerous jurisdictions across the United States. The current rate of major violations, the key food borne illness risk factors, is at least 40% and as high as 80% of food establishments in certain geographical areas. The occurrence of major violations can be reduced below 20% of establishments inspected if the following is done:

- 1) The food regulatory program is able to identify high, medium and low risk food establishments to prioritize inspection frequencies and maximize staff efficiency. The level of risk is based on the complexity and potential risk of the foods served and how they are prepared within the establishment;
- 2) The program standardizes the inspections by requiring explicit documentation on all three risk categories of food establishments in order to document the observations of critical operations within the establishment. (food borne illness risk factors such as proper food cooking and holding temperatures, personal hygiene practices by employees, cross contamination issues, etc.); and finally;
- 3) The program inspects high risk establishments three to four times annually, medium risk establishments at least twice a year and low risk establishments annually.

The statewide sanitation program has completed 1) and 2) above, along with the other numerous other program improvements mentioned.

There are other possible measures, such as mandatory food safety education and the posting of placards at establishments with major violations. Mandatory education will require resources for the provision of food safety trainers, for food establishments staff to take the training, and to track whether food establishment have trained staff on duty. Other U.S. jurisdictions were able to implement a very effective, high profile and successful win-win placard system with the food industry while protecting public health when the jurisdiction committed to proper staffing to allow high risk food establishments to be inspected at least three times annually. This enables establishments with unfavorable placards to be re-inspected in a timely manner so they can demonstrate their return to compliance.

TRAINING FOR INDUSTRY & PUBLIC

The branch retains its current voluntary educational approach to inform the public of proper food safety practices and motivate food establishment operators toward compliance with applicable standards and regulations. In this regard, it is recognized that compliance with rules, not enforcement per se, is the primary objective of the Sanitation Branch. Wide dissemination of information concerning the technical and scientific basis for the program's regulatory requirements should contribute to a clearer understanding of the necessity for compliance. Education is always continuous, especially in areas where technology is constantly evolving, as in the case of food science. An informed public with a clear understanding of the public health rationale of program functions and corresponding regulatory requirements is a fundamental goal in assuring that potential environmental health problems are identified and resolved before actual illness, injury or fatality occurs. This educational philosophy has evolved in part due to Hawaii's high food establishment to sanitarian ratio.

For fiscal year 2008, the Food Safety Consultation and Education Program provided the following:

Food Certification Workshops:	36
Student Attendance:	733
Students Certified:	655
Food Safety Classes	66
Student Attendance:	1,303

Food Certification Workshops are 16 hour (2 days) classes that deal with the principles of food safety and protection as it pertains to HAR 11-12 Food Establishment Sanitation. Successful completion of the workshop and examination results in the issuance of a Hawaii Department of Health Food Handler's Certificate. This certificate is the equivalent of education typically required for food handlers in states and counties that mandate food safety training for all food handlers within their jurisdictions.

Food Safety Classes are customizable classes that can range from one or more hours to address specific needs or problems of the requester. For example, if a food establishment has a problem with employee hygienic practices two to three hour classes concentrating on proper hygienic practices complete with hands on demonstrations and participation could be provided. No certificates are issued for these classes.

TRAINING FOR BRANCH PERSONNEL

In addition to on-going workshops conducted by the Food Safety Consultation and Education Program, the following are highlights of personnel training for fiscal year 2008:

- 1) A Registered Sanitarian attended the Train –the –Trainer for Environmental Health Training in Emergency Response in Sacramento, California on February 26-28, 2008. This seminar provided an all emergency response training that the sanitarian provides to all Environmental Health Services Division (EHSD) personnel at their annual Disaster Preparedness Workshop in August 2008.
- 2) Two Registered Sanitarians whose main responsibilities are regulating the milk industry in Hawaii attended the Pacific/Southwest Regional Milk Seminar in Reno, Nevada, March 31, 2008 to April 4, 2008. This seminar updates the sanitarians on regional trends and issues related to the milk industry including new technologies and trends. The conference attendance is a requirement for state milk rating officers.*
- 3) Two Registered Sanitarians attended the Conference for Food Protection in San Antonio, Texas, April 10 - 17, 2008. Hawaii is an active participant in this national conference and the sanitarians are voting delegates that participate in discussions and proceedings related to issues of food protection and safety. Measures that the delegates adopt are reflected in adoption or amendments of regulations in Federal Food and Drug Administration's (FDA) Food Code.
- 4) A Registered Sanitarian attended the Association of Food and Drug Officials annual conference in Anaheim, California on June 7 – 12, 2008. This conference provided a better insight of how other states responded to and dealt with the past years national recalls of fresh produce, canned goods and other consumer goods
- 5) Two Registered Sanitarians attended the National Environmental Health Association conference and workshops in Tucson, Arizona on June 19 - 26, 2007. This conference broadly covers the most current issues relating to environmental health and safety.*
- 6) A Registered Sanitarian attended the Southwest and Pacific Regional Milk Conference in Louisville, Kentucky on July 9 -13, 2007. This conference concentrates on regional trends and issues relating to the milk industry and reviews the amendments to FDA Pasteurized Milk Ordinance which were voted on in the 2007 National Conference of Interstate Milk Shippers.

* Although Hawaii's Dairy Industry is declining, the state is still an active participant in the National Conference of Interstate Milk Shippers (NCIMS) because we still address the safety of milk both brought into and sent from the state. Therefore, Hawaii is required to maintain certain qualifications and adhere to standards set by the NCIMS. One of the qualifications is to have at least one State Milk Rating Officer to conduct milk rating inspections locally utilizing national standards set by the NCIMS. To maintain certification as a State Milk Rating Officers one must attain NCIMS certification through FDA and attend approved seminars, classes and conferences.

COST OF TRAINING BRANCH PERSONNEL

The cost for branch personnel training is \$19,312.32.

CLOSING REMARKS

Despite continued efforts and progress in improving the overall quality and safety of foods produced in this country, food borne illnesses remain a serious national public health problem. This past year pathogenic E. coli, Norovirus and Salmonellosis contamination of food continued to find its way to the news headlines nationally. The CDC has consistently stated that food borne illnesses accounts for nearly 5,000 deaths annually in the United States and billions of dollars annually in lost productivity and the cost of medical care for the ill.

The Sanitation program directly affects nearly all residents and visitors to Hawaii. Any person in Hawaii who frequents the 9,000+ food eateries, markets, and liquor establishments or any other food sales or distributions that the Sanitation Branch inspects and permits is directly affected by our regulatory food safety program.

The Sanitation Branch is recognized for quality. In the past four years the Oahu Sanitation Program has produced five departmental Employee of the Year nominees and one Manager of the year nominee. This is over 25% of the staff of 23. The Big Island Sanitation Program has had one employee of the year nominee, and the Acting District Health Officer who for years directly oversaw Big Isle Sanitation is the State Manager of the Year. The Statewide Sanitation Branch has an extremely well run and tested program with a highly motivated staff that consistently delivers excellent public service with an eye towards constant and creative program improvement.

Continued vigilance in protecting the public from food borne illnesses is a vital function of the Sanitation Branch. Current resources are dedicated toward support of program activities, personnel enhancement, and technology infrastructure advancements. We will continue our efforts to prudently use current resources to protect public health.

